

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
24 July 2003 (24.07.2003)

PCT

(10) International Publication Number
WO 2003/059496 A3

(51) International Patent Classification⁷: **B01D 67/00**,
69/08, 71/26, D01D 5/24, D01F 6/06, B29C 55/00

(74) Agent: **KREIZLOVÁ, Dana**; SPUR a.s., Tolda Tomáše
Bati 299, 764 22 Zlín (CZ).

(21) International Application Number:
PCT/CZ2003/000001

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM,
HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX,
MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG,
SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
VN, YU, ZA, ZM, ZW.

(22) International Filing Date: 9 January 2003 (09.01.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PV 2002-184 16 January 2002 (16.01.2002) CZ

(71) Applicant (*for all designated States except US*): **EIDOS**
S.R.O. [CZ/CZ]; K Pasekám 5181, 760 01 Zlín (CZ).

(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI,
SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicants (*for US only*): **MALÁĚ, Jan** [CZ/CZ]; Brigád-
nická 767, 763 02 Zlín - Malenovice (CZ); **MALÁĚOVÁ,**
Helena [CZ/CZ]; Brigádnická 767, 763 02 Zlín - Malen-
ovice (CZ); **MALÁĚOVÁ, Jana** [CZ/CZ]; Brigádnická
767, 763 02 Zlín (CZ).

Published:

— with international search report

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **PLEŠEK, Milan**
[CZ/CZ]; Luční 4590, 760 05 Zlín (CZ); **LUŠN, Miroslav**
[CZ/CZ]; Slunečná 4548, 760 05 Zlín (CZ); **DOHNAL,**
Mirko [CZ/CZ]; Branky 21, 625 00 Brno - Ostrovce
(CZ).

(88) Date of publication of the international search report:
18 March 2004

*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: MICROPOROUS HOLLOW FIBER MEMBRANE WITH LENGTHWISE VARIABLE MECHANICAL AND FILTRA-
TION PROPERTIES AND THE METHOD OF THEIR PREPARATION

(57) Abstract: The microporous hollow fiber membrane is formed by walls with a system of slit-like micropores oriented in a
lengthwise direction showing constant size and density of the micropores across the fibre and variable size and density along the
fibre length such that the size and the density of the pores are lower towards the fibre ends. The invention also includes the method
of preparation of the hollow microporous membrane fibre.

WO 2003/059496 A3